

Résumé

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OBJECTIVE Work as an entry level to mid-level engineer in a reputed company to hone my knowledge in the field of optoelectronic materials and devices that would make use of my software application developer experience.

SUMMARY

- Graduate student in the Department of Electrical and Computer Engineering — Optoelectronic Computing Center — University of Colorado at Boulder
- Five plus years of industry experience including but not limited to networking application architecture, project management, software engineering and programming and two years of research experience in scientific computing and simulation
- Master's degrees in Optoelectronics/Optical communication and Physics
- Team player with good communication skills
- Motivation to do research work

EDUCATION

- Master of Science in *Electrical and Computer Engineering*
University of Colorado at Boulder, Boulder 2003
- Master of Technology in *Optoelectronics and Optical communications*
Indian Institute of Technology, New Delhi 1995
- Master of Science in *Physics*
Madurai Kamaraj University, Madurai 1994
- Bachelor of Science in *Physics*
Madurai Kamaraj University, Madurai 1992

WORK EXPERIENCE

- 2002–date Student Research Assistant — *National Oceanic and Atmospheric Administration (NOAA)*
— U.S. Department of Commerce, Boulder CO
 - Assistant to research scientist working in statistical modeling/analysis
 - Programming in R
- 2000–2001 Consultant — *Wagerworks.com (MGM)* — Oakland/San Francisco CA
 - Designed, developed and deployed the administration network
 - MQSeries Administrator
 - Java Servlet Application programmer
- 1999–2000 Consultant — *PNC Bank* — Pittsburg PA
 - Validation framework for banking products like loans and CDs
 - MQSeries, Java and XML programmer
- 1998–1999 Consultant — *McLeodUSA* — Cedar Rapids IA

- Analyzed requirements in IT&S (Intelligent Technology and Systems) group
- DB2, Java Applet, Servlet and JFC programmer
- 1996–1998 Senior Software Engineer — *IBM Global Services* — Bangalore India
 - JavaBeans programmer
 - Networking group (SNMP Manager, ARP) developer
 - Presented training courses to employees

ACADEMIC PROJECTS

- Study of waveguide/grating formation in nonlinear optical polymers.
 - Fabrication of NLOP waveguide, poling, photo bleaching and characterizing the waveguide
 - Simulation of viscoelastic properties of photo bleached dye doped packaging polymers
 - Communicated a paper to Indian Journal of Optics - *Photobleached Gratings in Electrooptic Waveguide Polymers*
 - Advisor — Prof. Alan Mickelson — University of Colorado at Boulder, Boulder
- Authored the thesis *Studies on in-line Fiber Polarizer using resonant tunneling effect*
 - Fabrication of half block with single mode fiber and multimode waveguide
 - Simulation of novel structure for optimization of PER (Polarization Extinction Ratio)
 - Comparison of the results with ARROW (Antiresonant Reflecting Optical Waveguide) structure
 - Advisor — Prof. Arun Kumar — Indian Institute of Technology, New Delhi
- Design of dispersion flattened fibers or W fibers
 - Numerical simulation of dispersion characteristics of optical waveguide for W fibers
 - Advisor — Prof. Bishnu Pal — Indian Institute of Technology, New Delhi
- Co-authored thesis *Enhanced electrical conductivity in $\text{LiNaSO}_4:\text{CeO}_2$ composite* — *Solid Electrolytes*
 - Experimental study involving differential thermal analysis and X-ray diffraction
 - Advisor — Prof. K.R. Balasubramanian — Madurai Kamaraj University, Madurai

SOFTWARE SKILLS

OPERATING SYSTEMS	Windows, SOLARIS, FreeBSD, AIX and Linux	
PROGRAMMING LANGUAGES	Object Oriented	Java, C++
	Structural	C, FORTRAN, BASIC
	Scripts	PERL, JavaScript, awk and sed
	Markup	HTML
	Modeling	UML
	Database	SQL (Oracle 8i)
TOOLS	IDE	VisualAge for Java
	Modeling	Rational Rose for Java
	Version Control	TeamConnection, Source Safe, Star Team, CVS, RCS
	Documenting	Lotus Word Pro, MS Word, \LaTeX 2 ϵ
	Managing	MS Project
	Middleware	MQSeries base Java, XML
	Statistical	R
	Scientific computing	MATLAB
WEB RELATED	HTTP servers	Apache, NES
	Servlet/JSP engines	WebSphere, JRun and JSERV

ADDENDUM - Course Work**Courses at University of Colorado, Boulder 2002-03**

Guided Wave Optics	Optical Properties of Material
Fourier Optics and Holography	Lasers
Nonlinear Optics	Optical Communications
Quantum Optics	Classical Electrodynamics
Numerical Methods	

Courses at Indian Institute of Technology, New Delhi 1994-95

Applied Optics	Signals and Communications
Quantum Electronics	Electronics and Instrumentation
Integrated Optics	Computer Networks
Optical Waveguides	Optical Communication Systems
Optical Electronics	Digital Communication and Information Systems
Optics Lab	Photonic Switching and Internetworking
Optics Workshop	Electronics Lab

Courses at Madurai Kamaraj University, Madurai 1992-94

Mathematical Physics I	Mathematical Physics II
Classical Mechanics	Electromagnetic Theory
Electronics Devices and Communication Systems	Numerical Methods
Statistical Physics, Thermodynamics and Low Temperature Physics	Quantum Mechanics I
	Lab I
Modern Optics	Nuclear Physics
Quantum Mechanics II	Spectroscopy
Analog and Digital Electronics	Solid State Physics II
Solid State Physics I	Microprocessors
	Lab II